


Before the

~~FEDERAL COMMUNICATIONS~~

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compatibility between televisions and video cassette recorders and cable systems, consistent with the need to prevent theft of service. Section 17 also requires the Commission to issue, within 180 days after the date the report is submitted,



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in this area, and have urged the Commission to lead a cooperative effort by representatives from the cable and consumer electronics industries and local governments to work toward developing compatible technologies. As discussed below, we believe the Commission should rely on such an effort to implement Section 17.

II. BACKGROUND

The City has received a steadily increasing number of equipment compatibility complaints from subscribers during the last several years. In 1987, the Manhattan cable television operators began to upgrade their systems, introducing addressable technology and, more recently, scrambled channels. Many subscribers have objected to the mandatory use of an addressable converter box, claiming that it renders useless certain features of their televisions and VCRs. Many subscribers also have complained that it is extremely complicated -- if not impossible -- to watch one program while taping another except by ordering -- and paying monthly charges for -- two separate converter boxes.



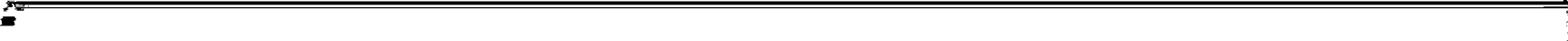







In response to growing frustration among consumers, the City has investigated problems in the compatibility of consumer electronics and cable system equipment, and has taken a number of steps to address these problems. As a first step, the City has permitted the Manhattan cable operators to scramble cable channels only if there is no state-of-the-art alternative to prevent theft of service. The City requires the companies to report to the City every two years regarding the development of state-of-the-art alternatives.

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The City held a hearing in May 1991 to determine, among other things, whether alternatives to scrambling do exist, and to explore current and future ways to mitigate the adverse impact of incompatible equipment on consumers. At the hearing, government officials and representatives from the cable and home electronics industries testified about the nature and extent of the compatibility problem.

In November 1991, the City released a report containing its findings and recommendations.^{4/} On the basis of the testimony and other information obtained during the investigation, the City determined that:

The use of converter boxes to descramble signals represents



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cooperation on the development of cable and consumer electronic equipment, and to proceed with the formation of an inter-industry group of industry and local government representatives as recommended in a letter sent earlier to the Commission from the City in connection with the hearing.5/

Last year, the City continued to press for action on the national level as Congress considered comprehensive cable legislation. Congress recognized the need for such action in enacting Section 17 of the 1992 Cable Act.6/

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- 5/ Shortly before the hearing, the City, by letter dated April 17, 1991, urged the Commission to take steps to assure that the cable and home electronics industries communicate with each other to, at a minimum, prevent the development in the future of incompatible technologies. We recommended that the Commission lead a cooperative effort by representatives from the cable and consumer electronics industries and local governments to work toward developing compatible technologies. A copy of the letter from William F. Squadron, Commissioner of the New York Department of Telecommunications and Energy, to Alfred Sikes, then Chairman of the Federal Communications Commission, is attached as Appendix B.
 - 6/ The City also has advised consumers to check with their cable companies before investing in new television receivers or VCRs to make sure that they are not spending money on features that will be incompatible with or superfluous to their cable service. And, we have pressed cable operators

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III. DISCUSSION

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group we recommend could play a critical role in ensuring that these issues are satisfactorily addressed over the long term.

In the near term, an active forum in which representatives of all interested parties exchange information and discuss solutions could provide invaluable assistance to the Commission, and ultimately, to consumers.

The inter-industry group could build upon the work currently underway by the joint Electronics Industry Association/National Cable Television Association committee. Although that committee has already begun to address compatibility issues, we believe that that committee's objectives should be pursued on a broader scale. As the City stated in its 1991 report:

While we agree that, over time, industry refines new technologies to make them more responsive to consumer needs and preferences, we believe that greater inter-industry cooperation can produce improvements in the area of equipment compatibility. The very existence of the Joint EIA/NCTA Committee demonstrates that the industries themselves recognize that some level of information exchange and cooperation can benefit their customers. It is apparent, however, that the Joint Committee has not succeeded in averting that development of incompatible equipment that in many cases has resulted in the diminution in value of a consumer's investment. Perhaps more significantly, it has made no effort to help the participating industries to advise consumers of potential compatibility problems associated with certain equipment purchases.

The City firmly believes that effective solutions will not be reached unless all affected and interested groups are involved in the process.

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The working group should include local government representatives. Local governments are generally the recipients of consumer complaints and inquiries regarding cable service, and have been active in addressing equipment compatibility issues for several years. Moreover, Congress "fully expect[ed] the Commission to consult representatives of franchising authorities and consumers in drafting the congressional report and regulations" required by Section 17 of the 1992 Cable Act.^{7/}

Local governments, in comments submitted in this proceeding, recommend specific issues which should be addressed by the inter-industry working group. The City urges the Commission to adopt these recommendations.^{8/}

7/ See 131 Cong. Rec. H6556 (daily ed. July 23, 1992)(statement of Representative Edward Markey).

8/ See Comments of the National Association of Telecommunications Officers and Advisors, the National League of Cities, the United States Conference of Mayors and the National Association of Counties (hereinafter "Local Governments"), dated March 22, 1993, in ET Docket No. 93-7.

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IV. CONCLUSION

The City of New York respectfully urges the Commission to adopt the measures recommended in these comments and the proposals of Local Governments in this proceeding. We believe Commission adoption of these measures and proposals will serve the Congressional objective of assuring that consumers "enjoy the full benefit of both the programming available on cable systems and the functions available on their televisions and video cassette recorders."

Respectfully submitted,

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APPENDIX A

**CABLE TELEVISION:
EQUIPMENT COMPATIBILITY HEARING**

**THE DEPARTMENT OF
TELECOMMUNICATIONS
AND ENERGY**

**WILLIAM F. SQUADRON
COMMISSIONER**

**NEW YORK CITY
NOVEMBER, 1991**

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BACKGROUND AND INTRODUCTION

On May 10, 1991, the New York City Department of Telecommunications and Energy ("DTE") conducted a day-long hearing at City Hall to investigate problems in the compatibility of consumer electronics and cable television equipment. The hearing was precipitated by steadily mounting consumer frustration over the introduction of converter box technology and the scrambling of non-broadcast channels by the two Manhattan cable franchisees, Manhattan Cable TV and Paragon Cable. DTE invited representatives of New York City's cable operators, cable equipment manufacturers, and the television and video-cassette recorder ("VCR") industries to explore current and future means of mitigating the adverse impact on consumers of incompatible equipment.

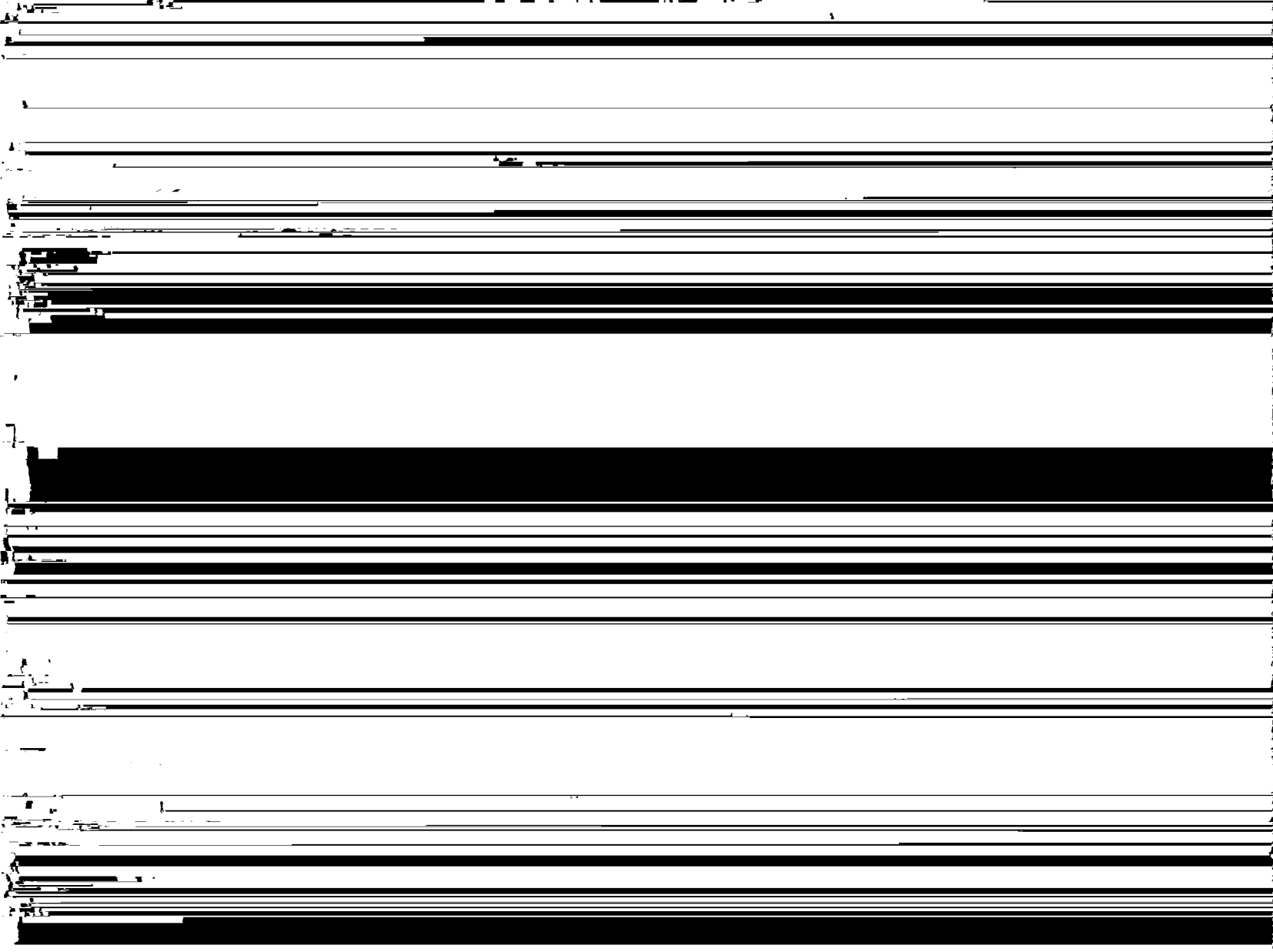
The industry hearing followed two public hearings held in April 1991 by Manhattan Borough President Ruth Messinger in conjunction with DTE and the New York City Department of Consumer Affairs. At those hearings, dozens of cable TV subscribers, access producers, community group leaders and staff members of elected officials testified about a variety of cable concerns, including difficulties caused by the use of a converter box. The converter box complaints echoed those expressed by residents of Manhattan's Upper West Side at a hearing hosted by State Assemblyman Edward Sullivan the preceding month.

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Richard Aurelio, President and Chief Executive Officer of the Time Warner NYC Cable Group, represented the Manhattan franchisees at the April hearing. Mr. Aurelio stated that the

provide an overview. Panels of expert witnesses representing the City's cable franchisees, cable equipment manufacturers, and consumer electronics manufacturers followed Councilwoman Greitzer.

DTE Commissioner Bill Squadron opened the hearing by reading a letter from Roy Stewart, Chief of the Mass Media Bureau of the Federal Communications Commission. Mr. Stewart had written in response to an inquiry regarding equipment compatibility issues and an invitation to testify ~~concerning~~ the FCC. Mr. Stewart is



induced them to purchase state-of-the-art equipment. The introduction of converter boxes and signal scrambling** will make it extremely complicated (and in some cases, impossible) for a typical viewer with a single television and a single VCR to watch one program while taping another except by ordering -- and paying monthly charges for -- two separate converter boxes.

Councilwoman Greitzer

Councilwoman Carol Greitzer stressed that she was not only a Manhattan Cable TV subscriber but that she also represents numerous cable-customer constituents who have "expressed their unhappiness to me." Councilwoman Greitzer touched on the service changes being introduced by MCTV and Paragon Cable. She contended that the changes are disruptive, unnecessary, and, above all, will result in increased costs to subscribers above the rate increases that went into effect several months earlier.

The Councilwoman's statement also addressed cable-ready television sets with their own remote controls that are currently

**/ Currently, the so-called premium services such as Home Box Office or Showtime are scrambled, and subscribers who purchase at least one premium service already have converter boxes in place. In the Paragon area, for example, approximately half of the company's 170,000 customers subscribe to a premium service. Both Manhattan companies plan, however, to scramble all but the Basic Service channels at the end of 1992, when the system upgrades are completed. The only unscrambled signals at that time will be the over-the-air broadcast channels, the access channels, and C-SPAN; such cable networks as CNN, MTV, and ESPN that are not currently scrambled will be, requiring the converter box for reception. Virtually all cable subscribers in Manhattan will therefore require a converter by 1993.

in use by many cable subscribers. She stated that, with the change in service, all subscribers will be forced to have at least one converter box, plus -- in many cases -- pay for a new remote control device provided by the cable companies.

Regarding the theft of service problem, Councilwoman Greitzer suggested that the cable companies should employ or develop alternative means of dealing with this matter that do not involve penalizing the consumer. According to a survey conducted by her office in Manhattan, many cable customers only acquired cable service to improve reception of over-the-air broadcast channels.

Cable Operators

The cable company panel consisted of Richard Aurelio, President of the Time Warner NYC Cable Group, which has complete or partial ownership of 6 of the 9 New York City franchisees; Dr. Walt Ciciora, Vice President of Technology for American Television Communications Corporation ("ATC") & Time Warner NYC Cable Group; Sheila Mahony, Vice President, Cablevision Systems Corporation (holder of 2 City cable franchises); and Wilt Hildebrand, Vice President of Engineering for Cablevision Systems.

This panel disagreed with much of Councilwoman Greitzer's testimony, denying that the channel scrambling, converter boxes, and remote control charges were driven by the cable companies' desire to raise revenue at the consumer's expense. Mr. Aurelio

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stated that converter box technology was essential to reduce the high incidence of theft in Manhattan, which Time Warner random audits place at approximately twenty percent. He noted that

other consumers were unfairly subsidized - while theft and that the

equipment and VCRs easier and more consumer-friendly.

Sheila Mahony discussed the transition period during which consumers become comfortable, over time, with new electronic equipment. She stated that Cablevision had not received many complaints from its customers in the Bronx or Brooklyn regarding the impact of the company's converter box on their television sets and VCRs.

Wilt Hildebrand expanded on the experience that Cablevision has had with its customers in Brooklyn and the Bronx. He described how Cablevision technicians explain to the consumer how to use the converter box and VCR at the time of installation. His testimony -- and the evidence overall -- indicated that customers in other boroughs have not objected to the converter box and its adverse consequences nearly as much as Manhattan subscribers who have had cable for more than a decade without a converter. Outside Manhattan, subscribers have nothing with

about the technology because it is too complex. He explained that most people do not want to contend with such complexities. Mr. Aurelio testified that he did not believe the consumer dissatisfaction with the converter box to be as extensive as Councilwoman Greitzer suggested, noting that "only eleven" of the witnesses at the April hearings in Manhattan addressed the incompatibility issue.

In response to a suggestion that Time Warner assist consumers with their equipment during the transition of the upgrade by offering additional service calls free of charge, Mr. Aurelio said he would review the matter.


All witnesses discussed the need to scramble all non-broadcast channels to combat theft of service. Ms. Mahony and Mr. Hildebrand stated that theft of service is not as pervasive in Cablevision's franchise areas as it appears to be in Manhattan (where converters and scrambling are only now being introduced), but said that Cablevision does have a special security group pursuing the thefts that do occur. The cable industry anticipates that descrambling will be built into TV/VCR systems within 20 years.

Cable Equipment Manufacturers

A four-member panel of television hardware manufacturers testified at the hearing. The panel consisted of Dan Moloney, Director of Marketing for Jerrold Division, General Instrument Corp.; Gary Trimm, Vice President for Subscriber Products,

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Scientific Atlanta, Inc.; Richard Annibaldi, Product Development
Manager, Pioneer Communications of America, Inc.; and Vito
Brugliera, President of Marketing & Product Marketing-Consumer
Electronics, South Electronics Cable Products, Inc.



scrambled channel while simultaneously using a VCR to tape another scrambled channel. Mr. Annibaldi stated that use of an antenna and the appropriate A/B switch can at least permit viewing non-scrambled, over-the-air broadcast stations, for example, while taping a cable channel.

Mr. Annibaldi claimed that state-of-the-art addressable converter/descramblers have improved considerably, and now offer a variety of consumer features which enhance their use, including:

- o Wireless Remote Control
- o Volume control (including muting)
- o VCR Timers (for multiple programs)
- o Favorite Channel Recall
- o Last Channel Recall
- o Impulse Pay Per View
- o Universal Remote Controls
- o VCR Programming Aids

Mr. Vito Brugliera noted that his company, Zenith, both manufactures television sets and supplies addressable converter systems to the cable industry. He testified that the dramatic advance of technology has outstripped the ability of the market to replace consumer electronic products. Statistics show that 92 million households contain 170 million TV receivers and 70 million VCRs. Moreover, Zenith estimates that more than 70% of its color TVs built since 1961 are still in service, although

these older sets may no longer be the primary TVs in the home.

Mr. Brugliera contended that cable operators and equipment manufacturers "devote considerable resources to develop economical technologies that will serve the cable customer and provide the entertainment, educational and informational benefits that cable is able to offer. In any advanced cable system there are three key technology concepts that the cable operator must have to provide those benefits as efficiently as possible: access, control and security." Mr. Brugliera elaborated on these three concepts:

Access. "Access" allows cable subscribers to tune the channels on a cable system. Even though there exist millions of "cable compatible" televisions in homes nationwide, there are also millions of sets, including early cable compatible models, that are not capable of tuning all of the cable channels used by particular cable systems. The cable operator must provide some means for the subscriber to receive all the cable channels on television receivers with limited tuning capability. According to Mr. Brugliera, the set-top converter box is the most efficient means of accomplishing this objective for older receivers.

Control. With respect to control, Mr. Brugliera echoed the testimony of Mr. Annibaldi regarding the consumer's enhanced ability to upgrade or downgrade programming services with the converter box. According to Mr. Brugliera, "this addressable technology becomes more important as the choice of programming expands...."

Security. Mr. Brugliera's third cable technology concept, security, involves cable signal theft. In the menu offered by cable operators, subscribers may decline certain programming options because of cost or content. Cable operators scramble such signals so that these subscribers are not able to view them. Unfortunately, piracy of these scrambled signals results in a loss of revenue to the cable company, which, according to Mr. Brugliera, ultimately results in honest subscribers subsidizing the pirates. Each year, cable operators nationwide lose an estimated \$3 billion in revenue from theft of service. Mr. Brugliera stated that this loss translates into a \$150 million lost to municipalities in franchise fees.

Mr. Brugliera testified that the battle between cable pirates and the cable industry has raged for years, with the industry sharpening its security techniques as the thieves become more sophisticated. Cable technology experts consider the converter box to be the state-of-the-art means of combatting theft because there is no unscrambled signal outside the home for